## Development of functional hyaluronic acid nanoparticle lead compounds for treatment of skin inflammation

## **Ajou University**



IMMUNOLOGY L	ead
Product Type	Hyaluronic acid-based Nanoparticle
Indication	1st indication: Psoriasis, 2nd indication: Contact dermatitis
Target	TLR4, CD44
MoA(Mechanism of Action)	Inflammation/immune response control through TLR inhibition
	Normal skin Psoriatic plaque Skin barrier dystunction Epidermal hyperplasia Keratinocytes UL23 UL17 THF-a UL22 UL18 UL18 Immune cell LL18 IL18 Immune cell Chemokines Inflittation
Competitiveness	<ul> <li>HA-NP as distinctive physicochemical and biological characteristics, such as biocompatible, biodegradable, non-toxic, and receptor binding properties</li> <li>HA-NP itself without any drug is a topical therapeutic agent that has anti-inflammatory activity and controls inflammatory diseases.</li> <li>HA-NP can be administered transcutaneously.</li> </ul>
Development Stage	Lead
Route of Administration	Topical, Subcutaneous, intravenus

